FIG.1

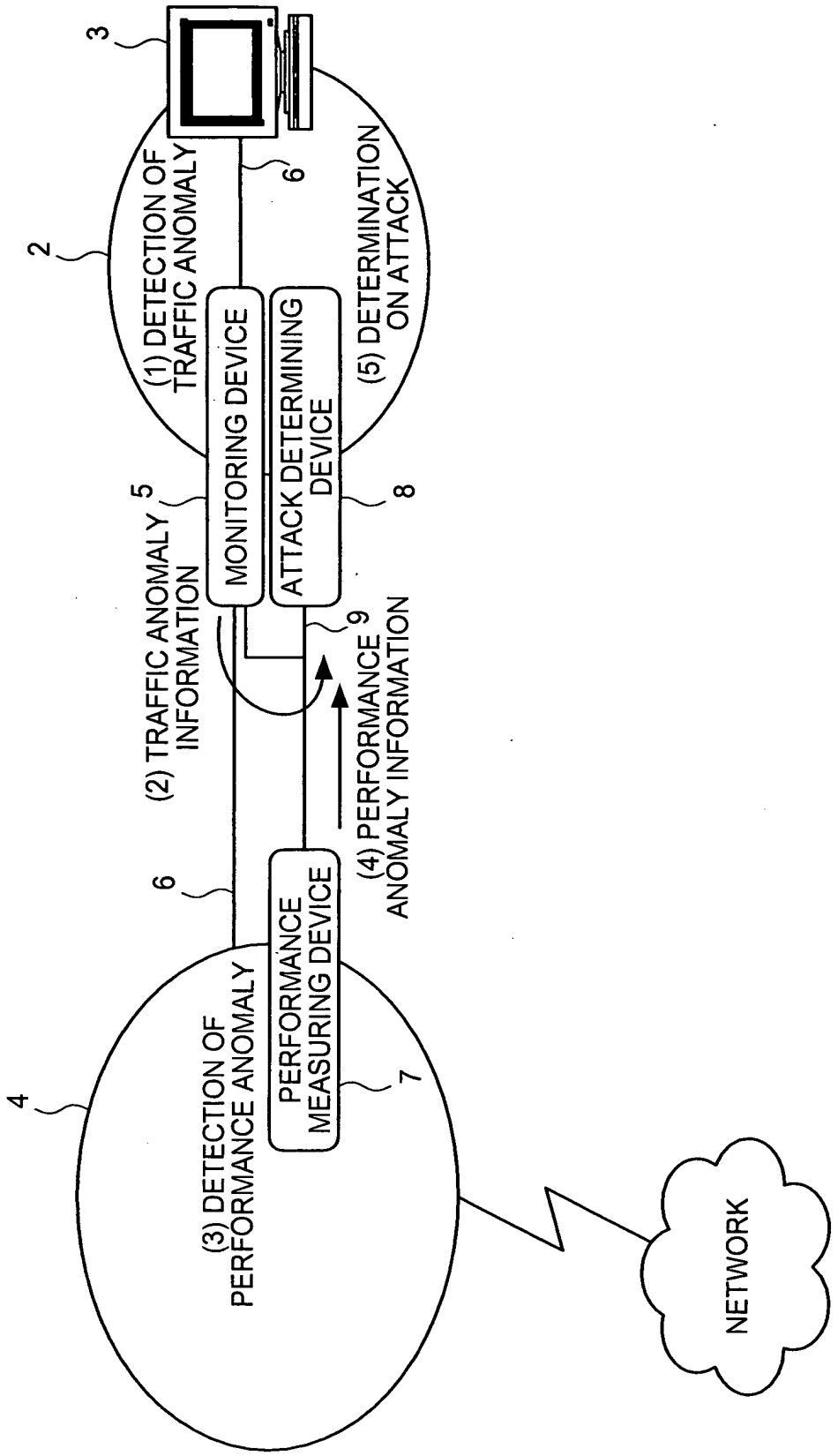

1
2
3
4
5
6
7
8
9
(1) DETECTION OF TRAFFIC ANOMALY
(2) TRAFFIC ANOMALY INFORMATION
(3) DETECTION OF PERFORMANCE ANOMALY
(4) PERFORMANCE ANOMALY INFORMATION
(5) DETERMINATION ON ATTACK
MONITORING DEVICE
ATTACK DETERMINING DEVICE
PERFORMANCE MEASURING DEVICE
NETWORK

FIG.2

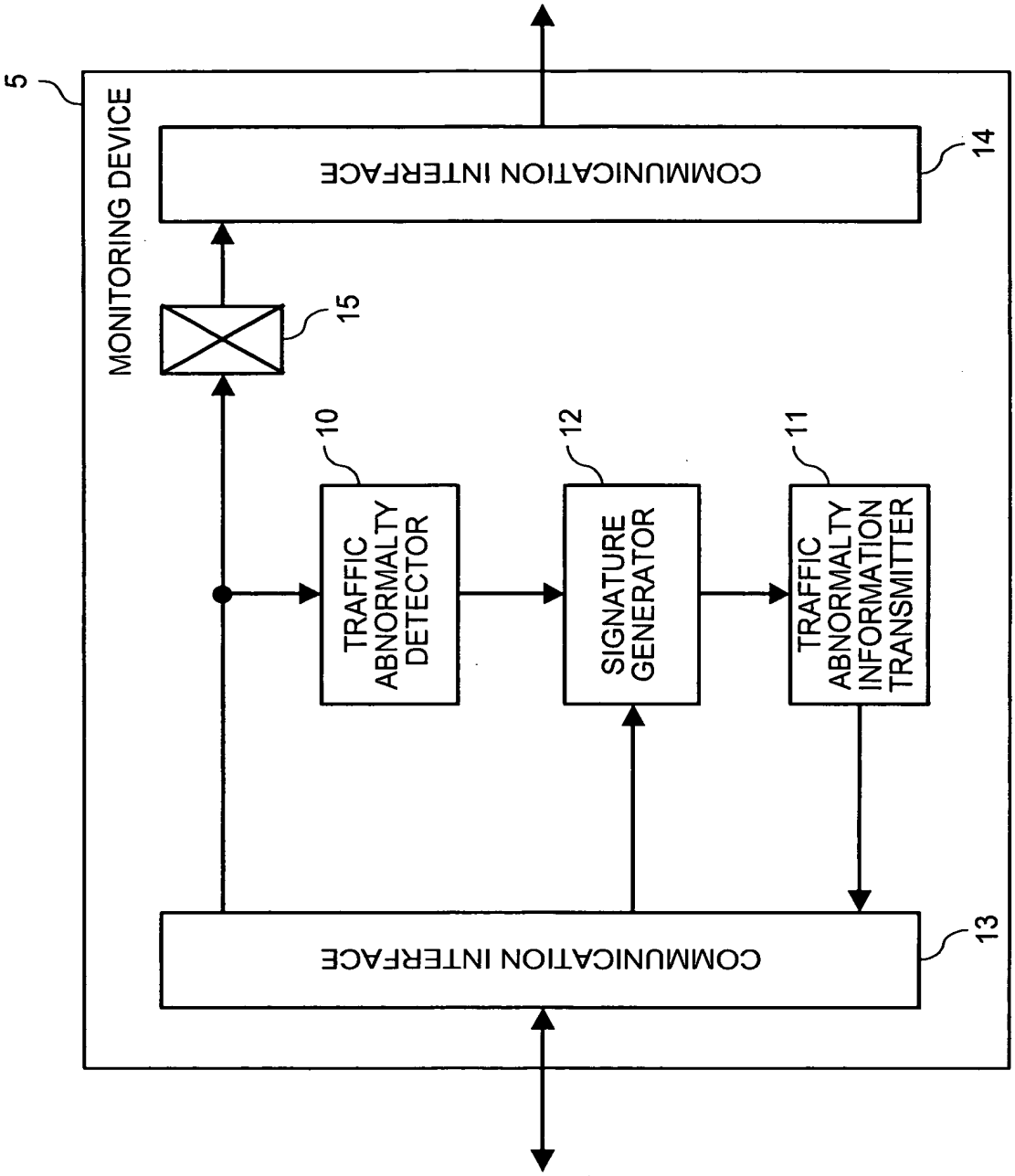

5
MONITORING DEVICE
COMMUNICATION INTERFACE
14
15
10
TRAFFIC ABNORMALTY DETECTOR
12
SIGNATURE GENERATOR
11
TRAFFIC ABNORMALTY INFORMATION TRANSMITTER
COMMUNICATION INTERFACE
13

FIG.3

	DETECTION ATTRIBUTE	DETECTION THRESHOLD	DETECTION TIME
1	{Dst=192.168.1.1/32, Protocol=TCP, Port=80}	300 kbps	10 SEC
2	{Dst=192.168.1.2/32}	100 kbps	10 SEC

FIG.4

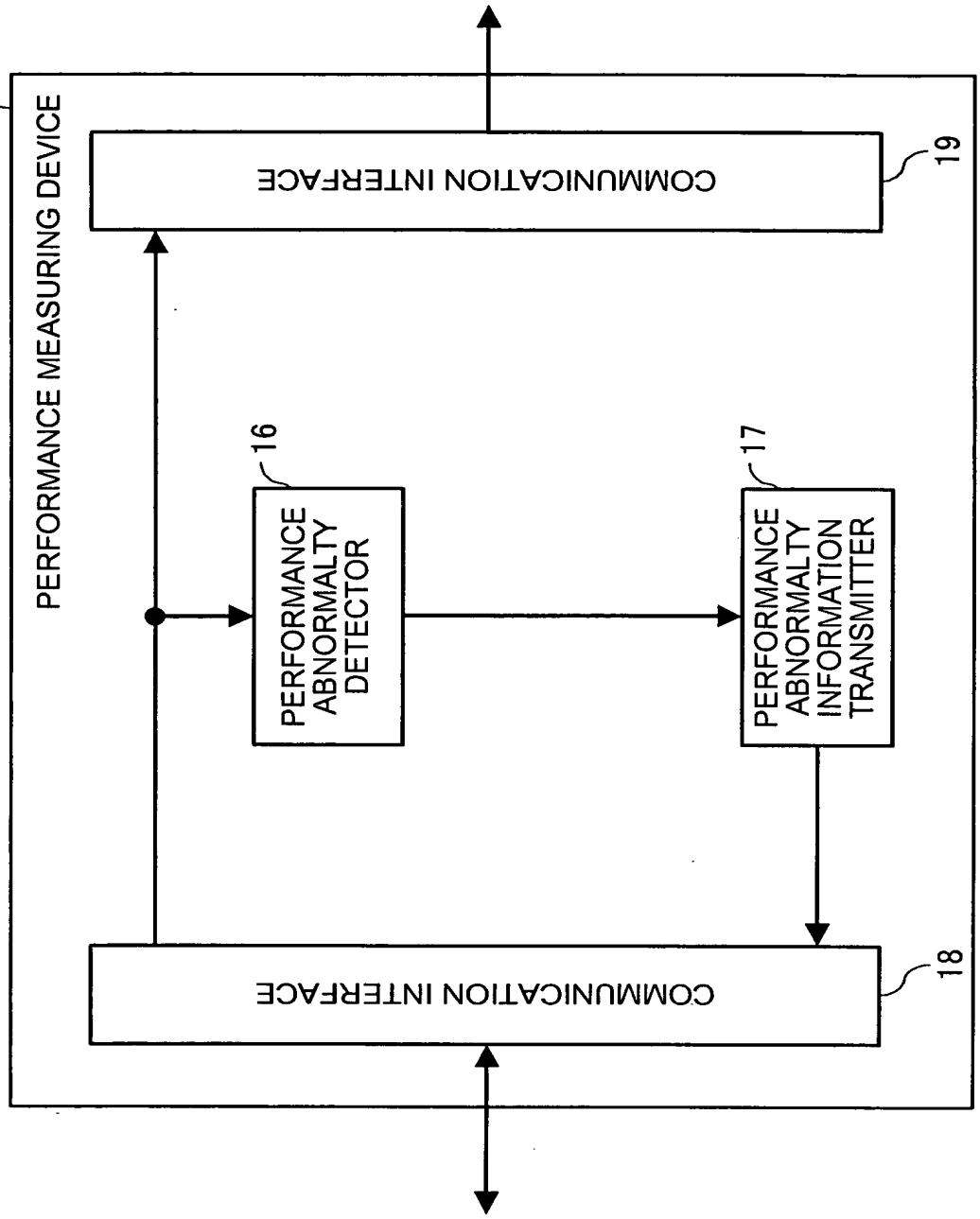

7
PERFORMANCE MEASURING DEVICE
COMMUNICATION INTERFACE
19
16
PERFORMANCE ABNORMALTY DETECTOR
17
PERFORMANCE ABNORMALTY INFORMATION TRANSMITTER
COMMUNICATION INTERFACE
18

FIG.5

	PERFORMANCE ATTRIBUTE	DETECTION THRESHOLD	TIMES OF DETECTION
1	{Dst=http://www.abc.com} {res="hello"}	5 SEC	2/3
2	{Dst=http://www.def.com/serch?hl=ja&ie=UTF-8&q=x+Y&lr=} {res="SEARCH RESULT"}	5 SEC	1/1

FIG.6

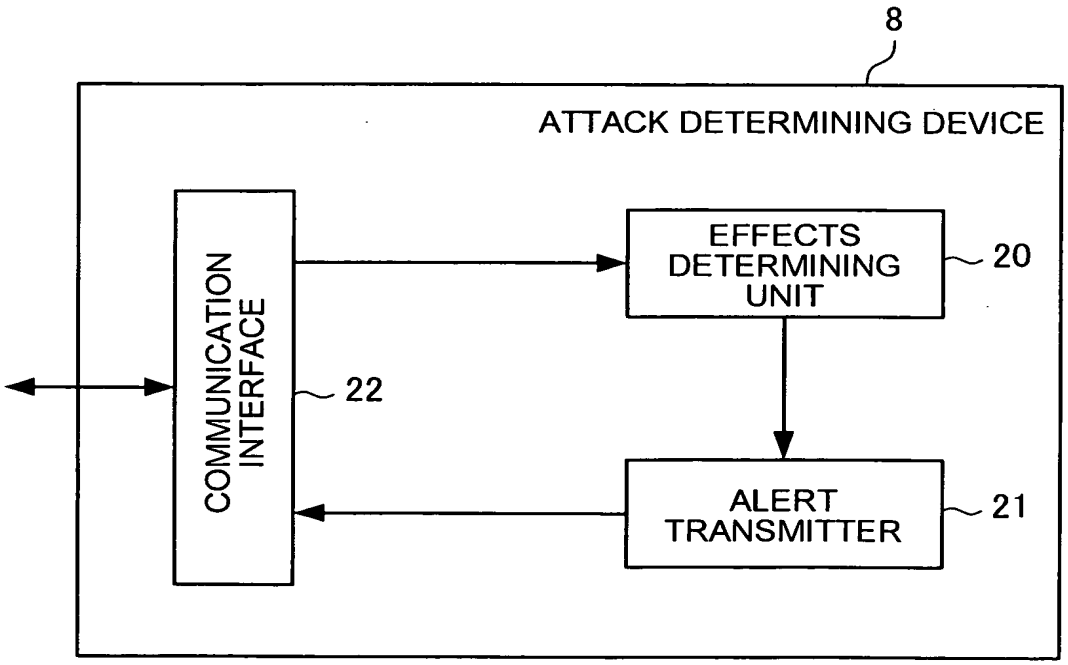


FIG.7

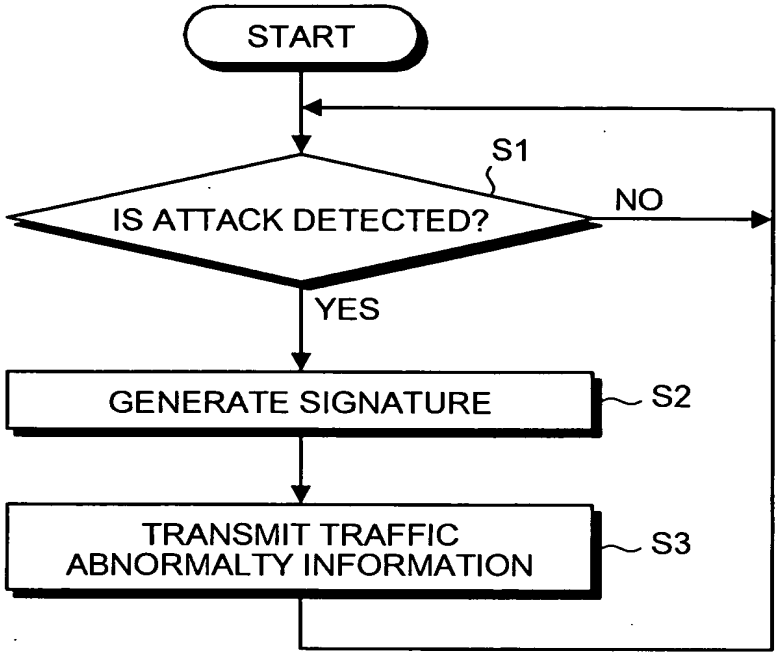

START
S1
IS ATTACK DETECTED?
NO
YES
GENERATE SIGNATURE
S2
TRANSMIT TRAFFIC ABNORMALTY INFORMATION
S3

FIG.8

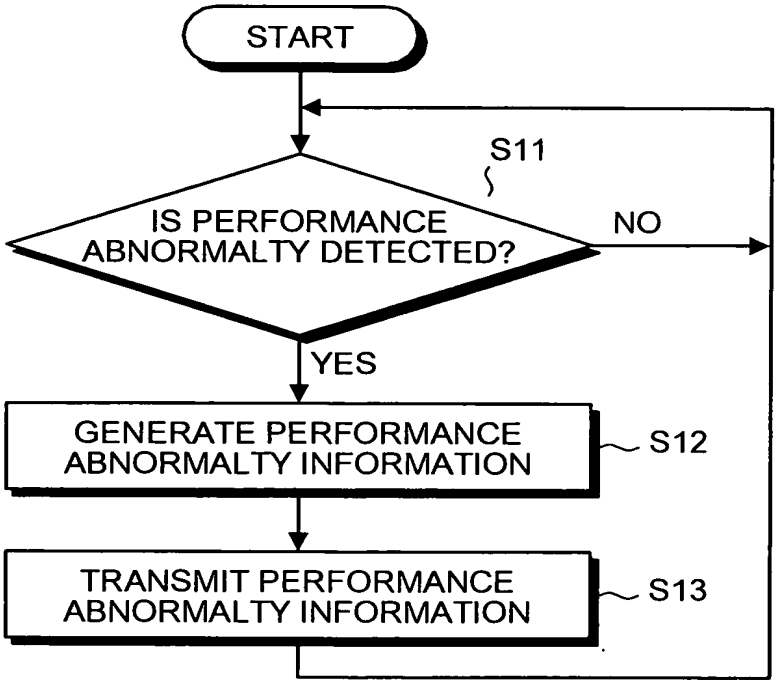
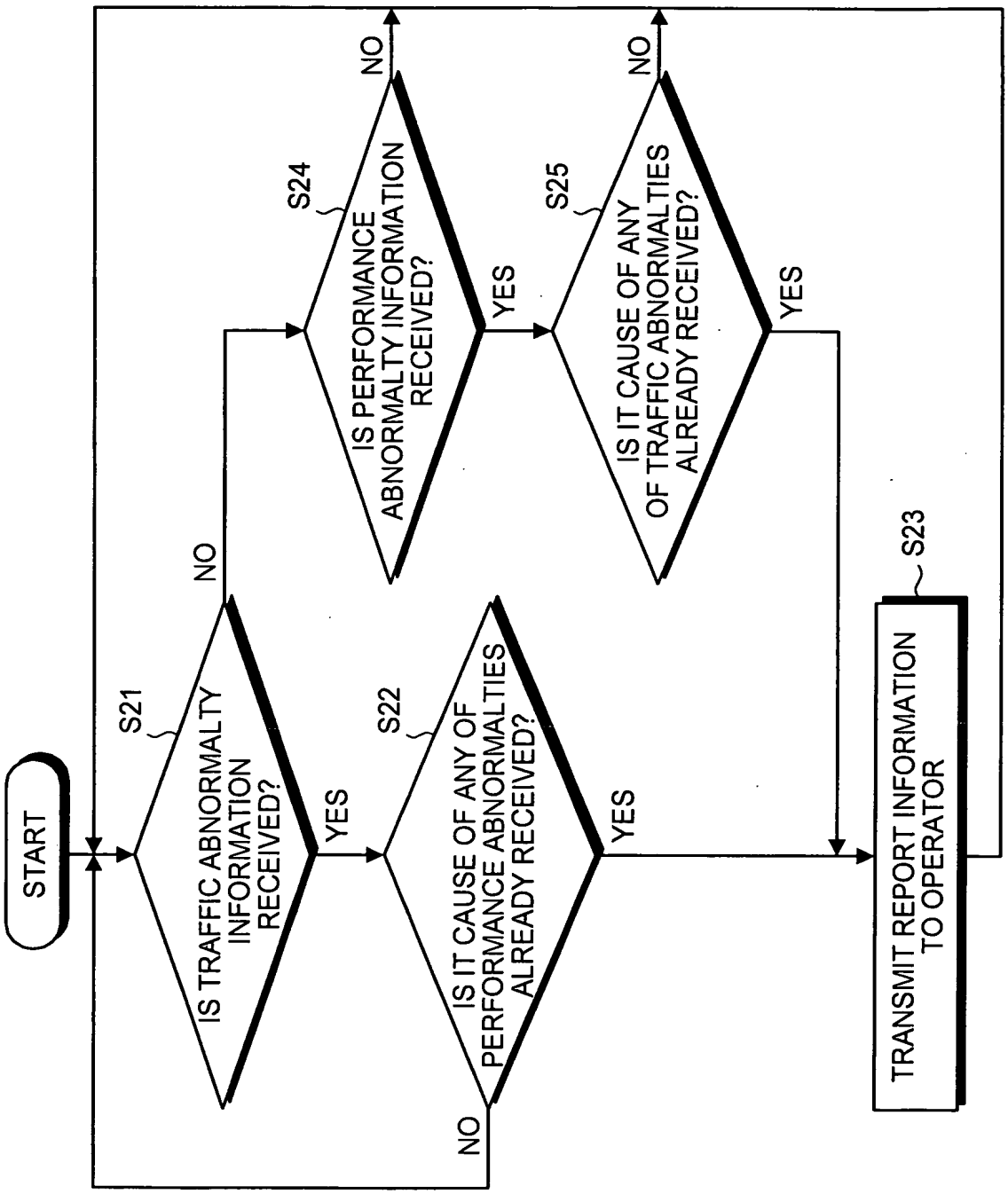

START
S11
IS PERFORMANCE ABNORMALTY DETECTED?
NO
YES
GENERATE PERFORMANCE ABNORMALTY INFORMATION
S12
TRANSMIT PERFORMANCE ABNORMALTY INFORMATION
S13

FIG.9


START
S21
IS TRAFFIC ABNORMALTY INFORMATION RECEIVED?
YES
NO
S22
IS IT CAUSE OF ANY OF PERFORMANCE ABNORMALTIES ALREADY RECEIVED?
YES
NO
S24
IS PERFORMANCE ABNORMALTY INFORMATION RECEIVED?
YES
NO
S25
IS IT CAUSE OF ANY OF TRAFFIC ABNORMALTIES ALREADY RECEIVED?
YES
NO
S23
TRANSMIT REPORT INFORMATION TO OPERATOR